# **Equity in Action Grant Program**

# **Grant Final Report Form**

Principal Investigators (PIs) are required to submit final reports within **60 days** of their EIA grant end date. A delinquent report may jeopardize or delay future Network funding. The information you provide helps us improve and justify the continuation of this grant program. The Network may also contact PIs for longer-term impact reporting and may request permission to use elements of these reports in Network activities (Conference sessions, Academy sessions, etc.) and communication both within the CSU system and to external stake-holders.

Summary Grant Information	
Grant Title:	Embedded Tutoring Pilot in SDSU's College of Professional Studies & Fine Arts (PSFA)
PI Name:	Dr. Alane S. Lockwood, Ed.D. in collaboration with Rebecca Tedesco, C.A.G.S., M.A.
PI Campus:	San Diego State University
Grant Start Date (month/YYYY):	June 2022
Grant End Date (month/YYYY):	December 2023
Final Report Submission Date:	February 29, 2024

In our grant-funded pilot, we sought to narrow equity gaps in courses in the College of Professional Studies and Fine Arts (PSFA) at San Diego State University. We embedded peer tutors in four classes with high DFW rates and lower success rates for students from groups that have been historically excluded from postsecondary education. Trained embedded tutors attended class meetings and led one-to-one tutoring appointments and group workshops outside of class for students in the section; tutors also met regularly with their faculty partners. Faculty partners participated in a community of practice throughout the year led by PSFA's Assistant Dean and principal investigator (PI) Dr. Lanie Lockwood and learning center coordinator and grant collaborator Rebecca Tedesco. We were awarded \$20,000.

# **Major Outcomes**

1. Summarize your project's outcomes against the original goals proposed for advancing equitable student learning, engagement, progression, and completion.

The overarching goal of our pilot was to narrow equity gaps in some of our college's courses by reducing the number of DFW grades and grade differentials between historically underserved student populations and their peers. This section of the report will explain our results based on the goals stated in the proposal for enrolled students, peer tutors, and faculty partners.

#### Students' DFW rates

Our official pilot period was the academic year 2022/2023. We have cohort institutional data from fall semester 2022; but, unfortunately, due to a complete campus-wide adoption of a new student-information system (PeopleSoft) during our grant implementation, we have been unable to get the same data for the spring 2023 and forward classes. We purposefully waited until the end of the grant reporting window with hopes of having the spring 2023 data provided to us. As of this writing, we remain unable to access data for spring 2023. We have qualitative data for spring 2023, however, and a limited amount of aggregated spring 2023 data.

Equity gap outcomes as measured by DFW grades from the four courses in fall of 2023 compared to the same course in fall of 2022 show mixed results. Gaps between male-identified students and female-identified students narrowed in two courses, had no change in one course, and widened in one course. For students who had commuted to SDSU their first year, their DFW rates improved in two courses and worsened in two courses compared to students who spent their first year in the residence halls. Gaps between first generation students and college-going generation students improved in two courses and the sample was too small in the other two courses to assess. However, overall DFW rates improved in three of the four courses, ranging from a seven percentage point reduction to a 12-percentage point reduction compared to the previous fall semester, according to the CSU Student Success Dashboards. Importantly, the average class grade for students improved from the previous fall semester offering of the same courses. In three of the four classes, grades improved anywhere from 4% to 61%.



Our office of Analytic Studies and Institutional Research (ASIR) was able to conduct statistical analyses (e.g., matched data, t-test) comparing all students enrolled in courses with embedded tutors for both Fall 2022 and Spring 2023 semesters (n=491) with a control group (n=649) to find the effect of embedded tutoring. They found that students who completed a course with an embedded tutor achieved a course grade that is .29 higher than their peers. This finding is statistically significant, based on the p-value.

Since we set out to assess equity gaps of specific student populations, we compared descriptive statistics of students who attended tutoring or learning coaching sessions outside of class compared to the overall college student population. Results show more juniors and seniors attended appointments compared to freshmen and sophomores, as well as more than the average PSFA junior and senior. The class level with the lowest tutoring usage was sophomores, who were also less likely to use tutoring than the overall PSFA sophomore population. Students who identify as Latine are the most likely to use tutoring and learning coaching in PSFA.

Latine students were also slightly more likely to attend tutoring sessions than the average PSFA student identifying as latine. Students who identify as African-American/Black were also more likely than their PSFA peers to attend tutoring and learning coaching sessions, as well as international students and those who stated an "unknown" racial/ethnic identity. Students who identified as female in this pilot were 16 percentage points more likely to attend a tutoring or learning coaching session compared to the average female-identified student in the college. Male-identified students in the pilot were about 15 percentage points less likely to attend a tutoring session than the average male-identified student in the college. First-generation college students were slightly more likely to attend a tutoring session compared to students from families with college-going experience. Transfer students were also more likely to attend tutoring/coaching sessions than their PSFA peers (17 percentage points), while freshmen were less likely (17 percentage points).

## **Metacognitive Learning Strategies**

Another proposed goal was developing increased student confidence in metacognitive learning strategies. A couple of key themes related to this goal emerged from qualitative analysis of program artifacts:

- 1. Embedded tutors and faculty partners devoted time to metacognitive learning strategies in courses with embedded tutors.
- 2. Embedded tutors, faculty partners, and the students themselves perceived increases in overall student confidence in courses with embedded tutors.



The concept of metacognition was first introduced by Flavell (1976). Harris and Hodges (1995) define it as "awareness and knowledge of one's mental processes such that one can monitor, regulate, and direct them to a desired end" (p. 153). Among educators, metacognition is often defined simply as thinking about one's thinking. Courses with embedded tutors might be ideal places to introduce students to the use of metacognitive learning strategies, which are associated with higher grades and grade-point averages (GPAs) and other positive markers of student success (Brown, 1978; Bryce et al., 2015; Flavell, 1979; McGuire, 2015; Perry et al., 2018; van der Stel and Veenman, 2010; van der Stel and Veenman, 2014; Veenman and Elshout, 1994; Veenman and Spaans, 2005; Wang et al., 1993; Wilson & Conyers, 2016).

In our pilot, students described the metacognitive learning strategies they developed from interacting with their embedded tutors or in-class instruction. For example, one student wrote in a tutoring-session reflection how they might maximize their learning in their next appointment:

"For next time, I would like to start studying I-2 days before the session, so I can come with a better understanding of terms, [and] therefore ask better questions."

Although the student did not use the term "metacognition," this excerpt shows them reflecting on their learning experience and using their observations to make an action plan for the future, which is an example of metacognitive thinking.

Another student showed appreciation for how their embedded tutor "guides" them to the right answer, so they learn to think for themselves. In their end-of-semester survey they wrote:

"I think it helps to have an embedded tutor in the class because they feel like a teacher from the perspective of a student, in that they essentially know the answers to certain questions and prompts, and guides [sic] us to the right answers without directly giving us the answer."

Quantitative data collected support these findings. Of the three courses surveyed at the end of the semester, 71% of responding students reported the embedded tutor was helpful or very helpful in students developing their learning and study strategies.

Embedded tutors in the pilot also wrote about teaching students metacognitive learning strategies with their faculty partners. For example, in an end-of-semester survey, one tutor wrote:

"One thing my faculty partner did a great job of, was teaching students different ways to work on certain assignments. For example, she asked the class how they read and take notes on academic journals. She then responded by saying that everyone's answers were right. She then showed the class videos . . . on some different ways to take notes. This experience showed me what metacognitive equity (or at least striving for it) looks like in the classroom. My faculty partner continuously said she wanted everyone to succeed in her class and it absolutely felt like that."



This excerpt shows the layers of intentionality that embedded tutoring can potentially bring to a classroom. Here we have a tutor describing what they learned from watching their faculty partner work with students, which they will, in turn, use to hone their tutoring craft with students from the same class.

Another tutor, thinking metacognitively, made observations about possible effects of the Covid-19 pandemic on their students' learning. They wrote:

"I feel like students are still being affected by C19[Covid]/online learning conditions and are struggling to readjust to in-person classes and basic study skills. Compared to my prev [sic] upper division class I was embedded in, there were more people struggling with taking notes, filtering information, and making study material."

It is very meta that the tutor applied metacognitive thinking to better understand their students' learning in order to better support them!

Professors in our pilot's community of practice also described modeling metacognitive thinking for their students. In one meeting, a faculty member described leading an in-class discussion about an upcoming paper:

"And I asked the students, like, how many of you have written a research question before and only two raised their hands . . . And I was like, okay . . . those of you who have written research questions before, were you ever told how to do it? Like what's the logic behind it? And they're like, no, I just got grades on it. And I was like, okay. And so we spent today just walking through the logic of a research question. And I also asked them like, ah, how many of you have ever written an annotated bibliography before? Three raise their hands out of a class of 45. I said, okay, how many of you like, if I told you you had to do it right now, would feel comfortable being able to summarize in your own words a journal article, and none of them raise their hand. And I was like, okay, so [our tutor] and I are putting together an activity on Wednesday where students have to bring in an article they've read, and we're going to go through, okay. How do you put into your own words the thing that is most important about this article and how it ties to your research?"

This is an example of the professor modeling metacognitive thinking, because the class is exploring why and how to conduct these research processes, not only what to do to achieve the desired end result. Later in these remarks, the faculty partner said that, before working with an embedded tutor and learning about metacognitive thinking, they might not have slowed down to ask their students these questions in the first place. One of their colleagues also explained in a survey response what they learned about teaching metacognitive thinking from their tutor partner:



"[Meeting regularly with the embedded tutor] helped me understand which study and learning skills students were struggling with, so I could break down assignments into smaller steps (more scaffolding) and also to address those issues up front rather than wait for complaints or confusion after the fact."

This interplay between the faculty member and their tutor partner shaping the professor's understanding about learning and teaching is precisely what we hoped to see in our pilot.

# Perceptions of Tutoring, Learning Assistance, and Help-Seeking Behaviors

In large, lecture-based courses, we noted one challenge was ensuring all students actually knew their class had an embedded tutor and the tutor's role. For example, in our largest class in fall 2022 (n=116), approximately 13% of those who responded to an end-of-class survey about tutoring (n=60) were not even aware they had an embedded tutor in their class.

In three classes surveyed, students who met with embedded tutors reported positive experiences, thus meeting one of our goals to facilitate positive perceptions of tutoring and learning assistance. Across the three classes, an average 75% who met with the embedded tutor either individually or in a workshop (n=44) reported their session(s) were helpful or very helpful. Additionally, 74% said they would like to have embedded tutors in future classes.

Importantly, students self-reported feeling more confident in their abilities as learners after participating in one-to-one appointments or group workshops with embedded tutors. For example, in a reflection about their appointment or workshop, one student wrote:

"After the session, I felt way more confident with my understanding of each movement and my studying for the quiz. Something that I will remember from the meeting is how patient and respectful [my tutor] was when I couldn't express myself or my thoughts as fast as a native English speaker."

Another said, "At first I was nervous for the midterm but after going to the study session and asking some questions I know [sic] feel more comfortable tackling the midterm and being able to study up for it through taking in the information provided by the study guide bit by bit." A third student wrote, "After the session, I felt relaxed and prepared. Now I know that I have all of the tools I need to succeed on the exams in my art history courses. One thing that I will remember from the session is that a lot of the actual learning can happen at home after the fast pace flow of information that happens in class." It is exciting for us to read these testimonials from the students in our pilot program, because they speak to the depth of the students' learning.

One of the most frequently stated reasons students gave in open-ended questions for not attending tutoring was saying they did not need help, which underscores the mistaken perception and stereotype that tutoring and learning assistance is available and helpful only for students who are struggling academically.



# Sense of Belonging

Another goal through this pilot was to help contribute to students' sense of belonging at SDSU. One hundred percent of embedded tutors in the pilot (n=4) reported an increased sense of belonging not only at SDSU but also in postsecondary education (two distinct questions). This is important because three of the four tutors identify as first-generation students. Unfortunately, we did not create a similar measure of sense-of-belonging for enrolled students in this pilot. However, two of the faculty partners expressed in their reflections that engaging in this community of practice increased their sense of belonging to the College and to SDSU! This finding is important because one of the faculty members who expressed this is a long-time lecturer (temporary faculty) and the other is from the tenured/tenure-track ranks; both are from marginalized communities within the university.

#### Persistence

In this pilot, we defined persistence as students returning to SDSU for subsequent semesters after their course with an embedded tutor. Our assessment plan was to identify students who completed their semester with an embedded tutor and see if they enrolled in the following semester. We also intended to assess whether students in impacted majors were progressing toward entering their major. However, due to the campus-wide change in student information software in the fall of 2022, we have been unable to access this kind of data for specific student cohorts.

3. Specify any unanticipated project developments (i.e., unanticipated barriers or unexpected wins)

A significant unexpected win that emerged is how the faculty involved in this pilot engaged in reflection and discussion within our Community of Practice (CoP) about their teaching practices and then worked to change their practices in response to the learning needs of their enrolled students. The faculty partners gained insights into their students' experience of their course and used that feedback to improve their course design. We observed how the faculty had "aha" moments by working with their tutor partner and used that information to change their upcoming lesson plans. They expressed having positive experiences afterward and noted improved student outcomes on the assignments. One of them said after participating in this pilot, they were planning to completely redesign the course to be more learner-focused. We believe outcomes like these are critical because instructors will take this new knowledge and skills forward to future offerings of the class as well as other courses they teach.

From this pilot, we gained valuable knowledge about assessment design for embedded tutoring that we will apply to our program in the future. Embedded tutoring is an increasingly popular model of academic support; there is not a lot of rigorous scholarship about embedded tutoring or how to assess it, however (Tedesco, in development). We learned we need to be more involved in the pre-and-post survey deployment and data collection. For example, we need to work with individual faculty to schedule deployment of surveys within their class schedules and syllabi. We also could have done more to more accurately measure students' metacognitive development, which we hypothesize is key to closing equity gaps. We will use this information as we continue to move forward with our college's embedded tutoring program.



We encountered a couple of unanticipated barriers in our pilot, including two college leadership changes and campus adoption of a completely new student information system during the first semester of the pilot. We submitted our grant proposal with the full, written support of the dean as one part of the college's strategic plan to address equity gaps for the academic year 2022/2023. This dean was also the one who approved the development of a college-level academic support center, the PSFA Academic Resource Center (PARC) and the creation of a PARC coordinator position. However, in the fall semester the dean announced they were leaving the university, then departed a couple months later and an interim dean was named in the spring semester. We were unsure if financial support for the PARC and the embedded tutoring program would continue after the grant period was over. There was a time when it looked like the PARC would have to close. We are grateful the interim dean was able to come up with a creative solution to keep the PARC open until the new dean arrived and would assess whether to keep the PARC open and its programs like embedded tutoring running. This caused a great deal of stress and additional position responsibilities for the PARC faculty coordinator, but we were able to protect our time with the embedded tutoring program because of this grant award.

The most significant barrier we experienced was unanticipated and it continues to affect our ability to get a full picture of this pilot's impact on student success: in the middle of the fall semester the university changed from a home-grown student information system to the most basic version of PeopleSoft. This affected not only every single process related to students and student-related processes on campus, but also the other campus software programs that interact with student data. The effects of this change on the day-to-day workload of anyone working with students and/or student data was enormous; colleagues needed to prioritize core functions of their units and this means our requests for student data results from this pilot were pushed to low-priority. We still have not been able to access course-level data from spring 2023 semester as well as cohort data.

4. If applicable, comment on any longer-term outcomes you anticipate from your Equity in Action Grant-funded project. Also please estimate anticipated achievement dates (month and year).

Several longer-term outcomes have resulted from our Equity in Action Grant-funded project, including our new dean advocating for institutional support and fundraising for our embedded tutoring program; establishment of a community of practice for faculty, especially lecturers; and, publication of a dissertation about students' learning in courses with embedded tutoring by a member of the PARC team.



First, the new dean of the College of PSFA has pledged support for the PARC and is eager to tell the story of our embedded tutoring program, and all of our programs, to a wider audience. She says she is not aware of other institutions at which a learning center is housed within a specific school or college and thinks our model is innovative. Under her leadership, we expect the dean's support for the PARC to materialize in our college's long-term strategic plan, currently under development, and in plans for the next academic year. She has already shared preliminary data about the embedded tutoring program with our university president and provost. The dean also supported our grant PI's suggestion that preliminary data about our embedded tutoring program be shared with retired faculty for development purposes, so the PARC can join the college's fundraising efforts. Our PI presented data to a group of faculty emeriti earlier this month and the presentation was met with a great deal of interest and inquiries about getting involved.

Since the faculty partners' response to the community of practice (CoP) has been so positive, we plan to create a separate CoP that any college faculty member may join for a year. We are particularly interested in providing this to our lecturer faculty, many of whom report not feeling supported in developing their teaching expertise. This will align with a larger commitment of our new dean to support the College's community of lecturers with connection, belonging, and professional development.

Lastly, the PARC's faculty coordinator is writing a dissertation about students' characterization of their learning in university courses with embedded tutoring. Her qualitative case study will explore how students understand their learning in an embedded tutoring course, to what extent the students' minoritized or privileged identities manifest in their understandings, and to what extent students' characterizations of learning match up with the professor's and embedded tutor's intentions and expectations. Had it not been for our grant work, she would likely not have decided to write on this topic, which is needed, because rigorous research about embedded tutoring is quite scarce. The expected publication date of her dissertation is May 2025.

#### **Assessment and Communication**

5. Describe efforts to communicate and disseminate project outcomes within your campus.

Our on-campus communication efforts to date have been limited to sharing preliminary quantitative data results and selected qualitative quotes with college leadership (e.g., department chairs, school directors and deans). All are excited by the preliminary results, such as a 0.3 higher course grade for students in embedded tutoring compared to control groups and the improved teaching strategies by faculty in the community of practice. We have been waiting for the full data set from our office of institutional data that includes course outcomes for spring semester 2023 as well as complete, deidentified cohort data sets so that we can have larger sample sizes and have as complete a picture as possible. Once we have complete data results, our communication plan is to create both a formal written report to be included in our yearly PARC report and a slideshow presentation.



The written report will be shared widely with campus stakeholders. The slideshow presentation will be presented formally to college leadership and to the schools whose faculty who participated in the CoP. The dean intends us to share these results during a town hall meeting with faculty in the fall of 2024. Our campus Center for Teaching and Learning (CTL) is also interested in this pilot program and will schedule a time for us to share our results with them. After that, we intend to share the results with campus colleagues who work in academic assistance programs and identify ways to grow the program. We also expect to present the information to campus leadership, such as the Provost's team, if invited.

We have also informally shared what we are doing in this pilot with our campus colleagues, along with our recently earned College Reading & Learning Association (CRLA) certification for our tutoring and peer educator program. From these two announcements, we've had another college meet with us to strategize ways to model their learning center similar to ours. We have also begun preliminary work to share results with potential donors, such as presenting preliminary findings to faculty emeriti in an effort to invite them to connect with our tutoring and learning assistance efforts. Finally, we wrote letters of support for faculty partners' RTP and teaching review files, explaining their involvement and dedication to professional development in teaching for student-centered learning.

6. Provide a summary of your assessment activities and results, where available.

We collected quantitative and qualitative data to measure the effectiveness of embedded tutoring in six classes during this pilot program in academic year 2022/2023. We assessed the impact of having an embedded tutor on student course grades, term GPAs, student perception of learning assistance, student understanding of, and confidence in using metacognition. We also assessed the tutors' skills in teaching metacognition as well as their sense of belonging. We assessed the impact of having an embedded tutor and participating in a related community of practice on the participating faculty's teaching practices. Our results were discussed previously in the Major Outcomes section of this report.

# **Quantitative Analyses**

We created surveys with Google Forms to collect pre- and post, self-report data from students and peer tutors. Questions sought, for example, students' impressions of tutoring in general and to what extent they felt having an embedded tutor in their class helped them. Unfortunately, we created these too late in the first semester for some of the faculty to use within the timeframe of their class schedule. Also, we prioritized providing faculty partners the freedom to deploy the surveys when convenient and to adjust the surveys if they wanted to. Unfortunately, this resulted in some faculty forgetting to deploy the surveys and some changing the questions and we therefore could not draw conclusions across all courses. We did secure post-survey responses from three of the six classes and analyzed those data. A fourth class provided us with qualitative student responses to questions, and these data were analyzed.



We drew from multiple existing sources of quantitative data. We used the CSU's Student Success Dashboards to obtain some DFW and equity gap rates for the courses; however, the dashboards did not include spring 2023 data. The dashboards also did not include all of our courses. We collaborated with our institutional research office for student comparison data. The office created de-identified datasets of the students enrolled in fall 2022 and spring 2023 courses with embedded tutors, used advanced statistical analyses to determine the effect of embedded tutoring on student's term GPA compared to control groups, created de-identified student cohort data so we could determine the effect of embedded tutoring on student's GPA compared to their pre-embedded tutoring experience GPA, and the office provided us descriptive statistics on students who attended tutoring appointments outside of class meeting times.

The cohort data is incomplete, unfortunately, due to the aforementioned campus change in student systems, delaying access to complete course-level data for spring, 2023. Once the cohort data set is complete, we will be able to run analyses to compare students' individual term data to their previous terms, as well as their post-embedded tutoring terms to see if there are any longer-lasting effects. The cohort data also has demographic and other student identity information will also allow us to determine effects within specific student populations.

## **Qualitative Analysis**

We used open and axial coding to analyze our qualitative data in MaxQDA. Data sources included responses to open-ended survey questions; contemporaneous memos written by students, faculty partners, and embedded tutors; and video transcripts of faculty community of practice meetings. Several interesting themes emerged from our analysis. For example, all groups of stakeholders described student learning taking place in these categories: assignment help, exam prep, reading strategies, research strategies, note taking strategies, and writing strategies. Faculty partners also shared key insights about curriculum and/or pedagogy, getting tutors' perspectives, and learning about how students learn. We also learned about obstacles to students engaging with their tutors. A major obstacle to engaging with the embedded tutor was students' perception that they did not need help—whatever that might have meant to them. Another obstacle was students not having time or the students' and tutors' schedules not aligning. Many students also wrote that they were not aware that there was an embedded tutor in the course and therefore did not engage with the tutors. The data we have highlighted in this report represent some of the most striking excerpts that we found in our qualitative data analysis.

#### **Lessons Learned**

We have learned a great deal from this pilot experience! We remain extremely grateful to the Student Success Network in the CSU for providing us with this opportunity. Some successful strategies we have identified from this pilot include designing and leading high-quality tutor training, having a robust faculty community of practice, situating the program within an established college strategic plan for GI 2025, creating evening tutoring and coaching hours to support evening classes, and providing a value-add for faculty partners.



High-quality tutor training is vital for a tutoring program to be successful (Casazza & Silverman, 1996; Sheets, 1994). In our pilot, embedded tutors engaged in more than 25 hours of training on learning science and best practices in education (e.g., how to identify students' Zones of Proximal Development, how to use scaffolds, and how to use effective, research-informed learning strategies). Also included in the training was a two-part series about metacognition, in which tutors learned how to develop students' metacognitive thinking and brainstormed ways that we might close metacognitive equity gaps (McGuire, 2021) in our college through embedded tutoring. In addition, tutors participated in a training about partnering with faculty that concluded with their first, expectations-setting meeting with their faculty partners. Our program would not have been as successful as it was were it not for embedded tutors completing this rigorous training, because it enabled tutors to be intentional in their work with their students and faculty partners.

The faculty community of practice was essential to the success of this embedded tutor program and future programs. Research in education strongly suggests that all learning is social (Frey, et al., 2019), so having a community of practice was critical. Also, faculty members were familiar with the model of having support for teaching, such as graduate student assistants or teaching assistants, but not familiar with a model of in-class support for student learning. Thus, as program leaders, we needed to orient faculty to this difference, provide ongoing explanation and training as situations emerged, and provide support for transformed teaching practices.

We brought the faculty partners together in advance of the academic year to orient and train them on what embedded tutoring is and how they might use the embedded tutor in class activities. This allowed them to redesign their lesson plans and syllabi in advance. Once the semester started, we met once a month. The meetings were structured by us, but most time was reserved for emergent topics. Over time, we observed how the faculty began asking questions of each other, such as "How do you handle..." and then helping each other. We would provide research-based strategies to guide these conversations. By the end of the pilot year, one of the faculty partners shared that after teaching the same class for 10 years, this experience led her to plan to completely redo her syllabus and how she taught it, in order to be more responsive to student-learning.

Another successful strategy we used was situating this pilot within a college-level strategic plan for GI 2025. The strategic plan had been developed in partnership with data from ASIR and approved by the Provost's office. Thus, even when ASIR resources were extremely thin due to supporting campus with the migration to PeopleSoft, they were able to support this project with some analyses due to their role in the GI 2025 plan. We would not be able to get robust analyses without their expertise.

Another lesson learned was adjusting tutor schedules to include evening hours for tutors supporting evening classes. Two of the classes met once a week in the evening (e.g., 4-6:40 and 7-9:40) and for these classes, we observed students were not scheduling with the tutors. We adjusted the PARC's schedule to remain open late one evening per week and the tutors adjusted their hours to meet with students before or after class. The tutors were immediately busy during these hours.



A final strategy was providing a value-add for faculty partners. Using approved funds from the grant, we paid for the faculty partners' lunches on the days we met. When we met virtually, we delivered lunches to each faculty member's office. This gesture was important to the faculty and highlights that we need to make available a stipend or other benefit to faculty members. As it turned out, most of our faculty partners were lecturers; lecturers are only paid for teaching their classes and not for professional development. Some of our lecturers even came in on their days off to meet with the CoP. This highlighted the importance of providing support to lecturers and recognizing the time they invested in our program.

By comparison, changes we plan to implement going forward are having a tightly administered assessment protocol, and increasing communication with faculty partners to include one-on-one discussions to address any misconceptions about the tutor roles and/or to provide more individualized support.

One big lesson learned from this pilot is that our assessment plan was not nearly as tightly controlled as it needs to be. In order to have consistent data from which to draw conclusions, we needed to have a much more clear assessment protocol that we deploy and maintain throughout the lifespan of embedded tutoring. In the future, we will create a single pre-survey and a single post-survey for each group of stakeholders (enrolled students, tutors, and faculty) that we will deploy to them in a predetermined time frame. As program administrators, we will introduce ourselves to enrolled students and deploy the surveys, removing faculty from this workload. Additionally, we will use the results from this pilot to revise our survey and target only specific student data to ensure we are measuring the program's effectiveness. We also want to expand our protocol to include assessing impact on faculty members "equity ethos" (Lockwood, 2023), which includes faculty members' impressions of equity (e.g., knowledge, values) as well as their expressions of equity (e.g., practices).

From this pilot, we also learned the importance of adding one-on-one meetings with faculty partners. While a community of practice is critical to advancing shared learning, we learned that some faculty members may have a different mindset about the role of tutors, student learning responsibilities, or they may need more help in working with a student tutor than they are willing to share in a group format. Like students who occasionally need one-on-one learning support, our faculty members also need occasional one-on-one learning support for this new model of teaching.

As referenced earlier, we believe the faculty partners need to be compensated for their time. By necessity, having a tutor partner means changing the way a class is taught and requires ongoing, frequent meetings with the tutor partner. This extra time should be compensated in order to entice more faculty, especially lecturers, to participate in our embedded tutoring program. One of our faculty partners mentioned how working with the tutor was similar to mentoring. We acknowledge this and believe there should be some recognition of this additional workload.



9. Given your experience with the Equity in Action Grant Program, what changes would you recommend to better support you toward your goals?

Our experience with the Equity in Action Grant program was extremely positive and we do not have suggestions to improve it. We appreciated the user-friendly approach taken from start-to-finish-meaning, the proposal requirements were designed to not be too onerous, there were ample offerings of help and occasional check-ins with other grant recipients, and our grant-related questions were quickly answered in the affirmative. The only change we offer is to continue the grant program with additional funding!

10. What can the CSU Student Success Network do to help your campus in its efforts to identify, understand, and disrupt inequities in our system?

This is an amazing resource for the CSU; we have participated in the data projects, attended some of the (free) conferences, and now participated in this grant program. Everything you offer is timely to CSU-specific needs and provides critical support. Thank you, and do not go away!



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